

REMARKS

Further consideration of this application is solicited. Claims 5-14 are pending herein. By this Amendment, claims 5 and 8 have been amended.

Applicants appreciate the Examiner's grant of the interview that transpired on January 22, 2008. It is believed that the interview will prove beneficial in advancing the prosecution of this application. Prior to the interview, the Examiner already had a good understanding of the Applicants' invention. Hence, the interview immediately focused on differences between the Applicants' disclosed arrangement and that shown in U. S. Patent 6,727,474 to Gat. Particular effort was directed to comparing Fig. 1 of Gat and Fig. 1 of the Applicants' disclosure. The Examiner reproduced a section of Gat's Fig. 1 on page 5 of the Office Action of October 2, 2007. This paper formally addresses the rejections made in that Action.

During the interview, the orientation of the blow holes in Gat's cooling pipe 18 was compared with that of the blow holes 26 in Applicants' cooling gas pipe 28. The undersigned emphasized that each of blow holes 26 in Applicants' Fig. 1 directly faces the reader. That is, each hole discharges gas outwardly in a direction perpendicular to the plane of the paper. Because Applicants' processing unit is embodied in a cylindrical container, this means that the blow holes 26 face or open in the "circumferential" direction of the cylindrical container body 4. Gas discharged from blow holes 26 thus moves circumferentially or "tangentially" along the interior cylindrical wall of the container body.

The interview provided the Examiner with an opportunity to clearly express his concern that claims 5 and 8, as presented in the Amendment of August 17, 2007, described the blow holes in a manner that focused too much on function and not enough on structure. As such, it was agreed that the undersigned would amend the independent claims in a way that emphasized the structural difference, that is the alignment of the blow holes with respect to the walls of the container. When this is done, as it now has been done in independent claims 5 and 8, it immediately distinguishes Applicants' structure from the blow holes of Gat's system, because

Gat's face inwardly toward the wafers 14 (Fig. 1). That is, contrary to Applicants' now claimed arrangement, Gat's blow holes face in the radial direction of Gat's container body.

For these reasons, claims 5 and 8 have been amended to define the processing container as having a cylindrical shape. This comes, for instance, directly from page 6, lines 30-32 of Applicants' specification. Further, claims 5 and 8 now each define that "each blowing hole is formed at a pipe wall of the cooling-gas introducing pipe to face in the circumferential direction of the processing container". Support for this description, of course, comes directly from Fig. 1. It also comes from Applicants' description in the first full paragraph on page 10 that the blow holes 26 must discharge cooling gas "in a tangential direction" within the "circular space 21."

Applicants also reiterate that "each" blowing hole must face in the circumferential direction of the container to so discharge cooling gas in the "tangential direction". Although it is difficult to determine the exact orientation of some of the blow holes in Gat's pipe 18, particularly, the lower holes, it is undisputably clear from Gat that each such hole does not open to discharge in the circumferential direction, as Applicants' claims 5 and 8 now require.

Now, specific reference will be made to the stated rejections in the October 2, 2007 Office Action. First, claims 5, 7, and 10 were rejected under 35 U.S.C. § 102(e) as anticipated by Gat. This rejection is traversed by the amendment to claim 5 made hereby. That is, Gat neither teaches nor suggests Applicants' cooling gas pipe structure with circumferentially-oriented blowing holes. Hence, the rejection of independent claim 5, and its dependent claims 7 and 10 is overcome. Withdrawal of this rejection courteously is solicited.

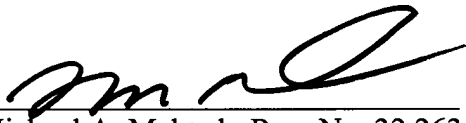
Claims 6, 8, 9, and 11-14 were rejected under 35 U.S.C. § 103(a) as purportedly obvious over Gat, or alternatively obvious over Gat in view of U. S. Patent 6,403,927 to Kato. These rejections likewise are traversed. Gat alone fails to teach or suggest Applicants' cooling gas pipe structure as set forth in the claims. The Kato patent does not remedy these deficiencies of Gat with respect to independent claim 8, or with respect to any of the several listed dependent claims. Hence, the rejections based upon alleged obviousness likewise are overcome and should be withdrawn.

In view of the foregoing amendments and remarks, it courteously is urged that all of the claims are allowable and that this application is in condition for allowance. Favorable action in this regard earnestly solicited.

If any other fees under 37 C.F.R. §§1.16 or 1.17 are due in connection with this filing, please charge the fees to Deposit Account No. 02-4300; Order No. 033082 M 277. If an extension of time under 37 C.F.R. § 1.136 is necessary that is not accounted for in the papers filed herewith, such an extension is requested. The extension fee should be charged to Deposit Account No. 02-4300; 033082 M 277.

Respectfully submitted,
SMITH, GAMBRELL & RUSSELL, LLP

By:


Michael A. Makuch, Reg. No. 32,263
1850 M Street, N.W., Suite 800
Washington, D.C. 20036
Telephone: (202) 263-4300
Facsimile: (202) 263-4329

Dated: February 4, 2008